



Aging reduces the accuracy of self-reported walking limitation in patients with vascular-type claudication

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Résumé en
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BACKGROUND: The published correlations between treadmill performance and the Walking Impairment Questionnaire (WIQ) score are generally fair. We hypothesized that the slope of the relationship of maximal treadmill walking time to WIQ would be lower in older than in younger patients, resulting in (1) a fair correlation in the population considered as a whole and (2) different cutoff points of the WIQ score to predict the ability to complete 5 minutes of treadmill walking in different age groups. **METHODS:** A 9-month prospective study was performed among patients referred for vascular-type claudication. Patients were divided into three age groups by years: <60 (group 1, n = 91), 60 to 70 (group 2, n = 80), and >70 (group 3, n = 77). Patients self-completed the WIQ, which was corrected with a nurse, if necessary, and then completed a treadmill test. We calculated the correlation coefficient and slope of the relationship between the WIQ and maximal treadmill walking time. We used receiver operating characteristics curve analysis to estimate the accuracy of the WIQ score to determine the ability of the patients to complete 5 minutes of treadmill walking. **RESULTS:** Differences in slopes were significant between groups 1 vs 2 ($P = .02$), 2 vs 3 ($P < .002$), and 1 vs 3 ($P < .001$). The $R(2)$ for the regression lines also tended to decrease but was only significant between two extremes (1 vs 2, $P = .11$; 2 vs 3, $P = .07$; 1 vs 3, $P < .001$). In patients aged <60 years (group 1), a WIQ score of 47 predicted the ability to complete a 5-minute test on treadmill with 86.8% accuracy (area under the receiver operating characteristics curve, 0.906; $P < .001$). The accuracy in predicting treadmill results from the WIQ score was fair in group 2 and nonsignificant in group 3. **CONCLUSIONS:** Prediction of treadmill walking capacity from the WIQ score should account for age. The TransAtlantic Inter-Society Consensus suggests that self-reported limitation has an equal weight as measured walking distance in the treatment choices and follow-up of patients with peripheral arterial disease. The WIQ should probably be used with caution in clinical routine, and constant-load treadmill testing is probably not the ideal candidate in elderly patients. New or adapted tools are likely needed in such patients but remain to be studied.

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